

Claims

[c1] An isolated nucleic acid having at least 80% nucleic acid sequence identity to:

- (a) a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30);
- (b) a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide;
- (e) the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29);
- (f) the full-length coding sequence of the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29); or
- (g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203174.

[c2] The isolated nucleic acid of Claim 1 having at least 85% nucleic acid sequence identity to:

- (a) a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30);
- (b) a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide;
- (e) the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29);
- (f) the full-length coding sequence of the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29); or
- (g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203174.

[c3] The isolated nucleic acid of Claim 1 having at least 90% nucleic acid sequence identity to:

(a) a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30);

(b) a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide;

(c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30);

(d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide;

(e) the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29);

(f) the full-length coding sequence of the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29); or

(g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203174.

[c4]

The isolated nucleic acid of Claim 1 having at least 95% nucleic acid sequence identity to:

(a) a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30);

(b) a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide;

(c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30);

(d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide;

(e) the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29);

(f) the full-length coding sequence of the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29); or

(g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203174.

[c5]

The isolated nucleic acid of Claim 1 having at least 99% nucleic acid sequence identity to:

(a) a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30);

(b)a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide;

(c)a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30);

(d)a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide;

(e)the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29);

(f)the full-length coding sequence of the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29); or

(g)the full-length coding sequence of the cDNA deposited under ATCC accession number 203174.

[c6]

An isolated nucleic acid comprising:

(a)a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30);

(b)a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide;

(c)a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30);

(d)a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide;

(e)the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29);

(f)the full-length coding sequence of the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29); or

(g)the full-length coding sequence of the cDNA deposited under ATCC accession number 203174.

[c7]

The isolated nucleic acid of Claim 6 comprising a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30).

[c8]

The isolated nucleic acid of Claim 6 comprising a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide.

[c9]

The isolated nucleic acid of Claim 6 comprising a nucleic acid sequence

encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30).

[c10] The isolated nucleic acid of Claim 6 comprising a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide.

[c11] The isolated nucleic acid of Claim 6 comprising the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29).

[c12] The isolated nucleic acid of Claim 6 comprising the full-length coding sequence of the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29).

[c13] The isolated nucleic acid of Claim 6 comprising the full-length coding sequence of the cDNA deposited under ATCC accession number 203174.

[c14] An isolated nucleic acid that hybridizes to:
(a) a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30);
(b) a nucleic acid sequence encoding the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide;
(c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30);
(d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 30 (SEQ ID NO:30), lacking its associated signal peptide;
(e) the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29);
(f) the full-length coding sequence of the nucleic acid sequence shown in Figure 29 (SEQ ID NO:29); or
(g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203174.

[c15] The isolated nucleic acid of Claim 14, wherein said hybridization occurs under stringent conditions.

[c16] The isolated nucleic acid of Claim 14 which is at least 10 nucleotides in length.

[c17] A vector comprising the nucleic acid of Claim 1.

[c18] The vector of Claim 17, wherein said nucleic acid is operably linked to control sequences recognized by a host cell transformed with the vector.

[c19] A host cell comprising the vector of Claim 17.

[c20] The host cell of Claim 19, wherein said cell is a CHO cell, an *E. coli* or a yeast cell.